



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION I**  
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**BOSTON, MASSACHUSETTS 02109-3912**

April 6, 2023

John Beling, Commissioner  
Vermont Department of Environmental Conservation  
1 National Life Drive, Main 2  
Montpelier VT 05620-3522

*Re: Lake Champlain TMDL Implementation Interim Report Card for Basin 3: Otter Creek, Little Otter Creek, and Lewis Creek; and Final Report Card for Basins 2 and 4: South Lake Champlain*

Dear Commissioner Beling:

Thank you for your progress report on Lake Champlain TMDL implementation contained within the “Vermont Clean Water Initiative 2022 Performance Report” (Performance Report) submitted to EPA on January 17, 2023. The well-documented and comprehensive report has given EPA a solid basis for evaluating Vermont’s progress towards completion of the work described in the Accountability Framework section of the 2016 TMDL document. EPA commends the staff that administer these programs and produced the report.

The purpose of this letter is to evaluate the state’s progress on the Phase 2 milestones – a mid-cycle review of implementation progress for the Otter Creek, Little Otter Creek, and Lewis Creek (Basin 3) Tactical Basin Plan (TBP), and the final review of Phase 2 implementation for the South Lake Champlain (Basins 2 and 4) TBP. The TBPs (also referred to as Phase 2 plans) have a five-year implementation cycle, and the TMDL Accountability Framework indicates that at the mid-way point of the five-year cycle, EPA will provide an interim assessment of state progress toward implementation actions for each plan. At the conclusion of the five-year period, EPA will review and provide an assessment of the state’s completion of these actions.

As a result of our review, EPA concludes that the state is on track towards accomplishing most of the five-year actions identified in the implementation tables for Otter Creek, Little Otter Creek, and Lewis Creek Phase 2 plan. EPA also concludes that Vermont has satisfactorily completed the five-year actions identified in the implementation tables for the South Lake Champlain TBP. The basis for this conclusion is explained below.

*2019 Otter Creek, Little Otter Creek, and Lewis Creek (Basin 3) Tactical Basin Plan Interim Progress Assessment*

To assess state progress in implementing the Otter Creek, Little Otter Creek, and Lewis Creek (Basin 3) TBP, we focused our review on Appendix B of the 2022 Performance Report. The report assesses progress for each action in the plan implementation tables using the following four categories: complete;

in progress (for actions that have a clear end point); ongoing (which refers to actions that are anticipated to continue indefinitely, such as outreach and education efforts); and not started.

In Basin 3, EPA is pleased to see that 88 percent of the 53 actions included in the implementation table have either been completed, are ongoing, or have a high or medium likelihood of completion by 2024. For the actions listed as “in progress,” the state has further broken out the status into those with high, medium, or low likelihood of being completed by the 2024 end date. A review of the status summary for each action indicates that excellent progress has been made for most of the “in progress” actions, as well as for the “ongoing” actions. Twenty-three percent of the needed phosphorus load reductions have been achieved according to Vermont Department of Environmental Conservation (VTDEC) estimates and to maintain this progress, continued and consistent funding and programmatic support will be important. EPA considers the state to be making strong progress towards completing the five-year implementation actions.

#### *2017 South Lake Champlain (Basins 2 and 4) Tactical Basin Plan Final Performance Assessment*

Appendix A of the Performance Report describes progress on the South Lake Champlain TBP. EPA is pleased to see that, overall, 97 percent of actions identified in the Phase 2 implementation table have either been completed or are in progress and will continue into the next phase of the South Lake Champlain TBP and we have determined that the state has made satisfactory progress in implementing the 2017 plan. Of the 59 actions in the implementation table, 27 have been completed, 30 are in progress, and 2 have been discontinued. A review of the status summary for each “in progress” action indicates that strong progress has been made for those that will be carried over to the next TBP. Phosphorus reductions for South Lake A and South Lake B were estimated to have met 49 percent and eight percent of the load reduction targets, respectively, set by the TMDL. Given the relatively small percentage of reduction achieved in South Lake B, it is critical that the pace of implementation increase as the next TBP is implemented.

#### *Overall Progress in Implementing the Lake Champlain TMDL for Phosphorus*

While the focus of these report cards is on the completion of milestones in the TBPs, EPA reviewed Vermont’s Clean Water Initiative 2022 Performance Report in its entirety. Beyond the successful implementation in Basins 2, 3, and 4, we note the many broader accomplishments documented in the Performance Report. The 2022 Performance Report indicates that actions tracked by the state so far have resulted in an estimated reduction of 39.9 metric tons of phosphorus per year, or about 19 percent of the total reduction target. This represents a relatively small increase in reductions from the previous year. We recognize that methods for tracking effectiveness of some measures continue to be further developed and that most of the results of new permit programs and related measures may not be measurable for several years, however, we note that the pace of reductions identified in the Performance Report in Figure 38 is lower than the necessary annual reductions, which calls into question whether TBP milestones and current efforts and funding are sufficient to reach the 20-year TMDL goals. Current average annual reductions have been 5.2 metric tons while DEC projects needing 11.5 metric tons to reach the TMDL goal.

Although there has been a high rate of achievement towards accomplishing the goals set forth in the implementation tables, and Vermont has satisfactorily completed the five-year actions identified in the

implementation tables for the South Lake Champlain TBP, the current pace of phosphorus reductions needs to increase to meet TMDL reductions by 2037. Thus, we urge DEC to ensure that the pace of reductions will accelerate as envisioned. We understand that the state transitioned a significant portion of its TMDL implementation efforts to a service provider model that provides block grants to support implementation in each basin. It will be important in the coming year to learn if this model begins yielding strong results, and if together with the state's expanded regulatory, financial, and technical assistance programs it accelerates phosphorus reductions. EPA looks forward to working with DEC in the coming year to keep apprised of progress by the service providers.

EPA continues to track the amount of funding dedicated to support implementation of the 2016 Lake Champlain TMDL. In State Fiscal Year (SFY) 2021, EPA observed a drop in funding available for clean water activities largely due to the impact of COVID-19 and its effects on the economy. Funding increased in SFY 2022, though only by a modest \$1.4 million. The 2022 Performance Report outlines the additional federal funding received through ARPA, the Infrastructure Investment and Jobs Act and increased Clean Water Fund revenue that may drive program expansion in 2023. As EPA has expressed previously, continued funding support will be critical to achieving the reductions still required to meet the TMDL.

We look forward to continuing to collaborate with you and wish to thank you and the Watershed Planning Program staff for a thorough review of this important work.

Sincerely,

Melville P. Coté, Jr., Chief  
Surface Water Protection Branch

Cc (via email): Neil Kamman, VTDEC  
Ethan Swift, VTDEC  
Emily Bird, VTDEC